Application Serial No. 09/396,245

<u>IN THE CLAIMS</u>

The following listing of claims will replace all prior versions and listings of claims in the above-referenced application:

1. (Currently amended) A computerized method for processing start-conditions processed by a computer system acting as a Workflow-Management-System (WFMS) or a computer system with comparable functionality, said WFMS comprising at least one process-model, said process-model modeling a process comprising one or more process-activities being nodes of an arbitrary graph and directed control-connectors of said graph defining a potential control flow within said process-model; said method <u>being operative to process start-conditions in one of at least a first mode and a second mode, the method comprising the steps of</u>:

in ~~a standard behavior~~ <u>the first mode</u> of processing start-conditions, ~~evaluating~~ <u>determining</u> if a target-activity representing a work item of said process may be started by evaluating a truth-value of a start-condition once truth-values of all incoming control-connectors of said target-activity have been ~~posted~~ <u>determined</u>; and

said method further comprising a timed-evaluation-step, said timed-evaluation step comprising the steps of:

evaluating if at least a first one of said incoming control-connectors is associated with a time-interval defining a maximum period of time, as measured from a reference point, after which the target-activity is to be started, and evaluating if said time-interval has expired,

and, in the affirmative case, said timed-evaluation-step, <u>in the second mode</u> ~~as a deviation from the standard behavior~~ of processing start-conditions, continuing the processing to start said target-activity even if not all truth-values of said incoming control-connectors have been ~~posted~~ <u>determined</u> yet,

if the truth-value of said first incoming control-connector has been ~~posted~~ <u>determined</u>, and

if said truth-value evaluates to TRUE<u>;</u>

<u>wherein the timed-evaluation-step is repeated until all control-connectors of the target activity have been evaluated, and wherein the method implemented on the computer system is by</u>

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default operative in the first mode, and the second mode is automatically selected when the truth-value of the first incoming control-connector has been determined to be TRUE.

2. (Previously presented) A method for processing of start-conditions according to claim 1, wherein said first incoming control-connector is associated with a commencing-activity, the commencing-activity corresponding to one of the process-activities in the process model, and wherein said timed-evaluation-step uses as a starting point for said time-interval the point in time when said commencing-activity is completed.

3. (Previously presented) A method for processing of start-conditions according to claim 2,

wherein said first incoming control-connector is associated with a path from said commencing-activity to said target-activity, and

said timed-evaluation-step is continuing the processing to start said target-activity, if said associated path has been traversed.

4. (Currently amended) A data processing system operative for processing start-conditions of one or more process-activities of a process in one of at least a first mode and a second mode, the system comprising means adapted to:

in a standard behavior the first mode of processing start-conditions evaluate determine, if a target-activity representing a work item of a process may be started by evaluating a truth-value of a start-condition once truth-values of all incoming control-connectors of said target-activity have been posted determined; and initiate a timed-evaluation-step, said timed-evaluation step comprising the steps of:

evaluating if at least a first one of said incoming control-connectors is associated with a time-interval defining a maximum period of time, as measured from a reference point, after which the target-activity is to be started, and evaluating if said time-interval has expired,

and, in the affirmative case, said timed-evaluation-step, in the second mode as a deviation from the standard behavior of processing start-conditions, continuing the processing to

start said target-activity even if not all truth-values of said incoming control-connectors have been ~~posted~~ <u>determined</u> yet,

if the truth-value of said first incoming control-connector has been posted, and

if said truth-value evaluates to TRUE<u>;</u>

<u>wherein the timed-evaluation-step is repeated until all control-connectors of the target</u> <u>activity have been evaluated, and wherein the data processing system is by default operative in the</u> <u>first mode, and the second mode is automatically selected when the truth-value of the first incoming</u> <u>control-connector has been determined to be TRUE.</u>

5. (Currently amended) A data processing program for execution in a data processing system for processing start-conditions of one or more process-activities of a process <u>in one of at</u> <u>least a first mode and a second mode</u>, the data processing program comprising software code portions which when executed implement the steps of:

in ~~a standard behavior~~ <u>the first mode</u> of processing start-conditions, ~~evaluate~~ <u>determining</u> if a target-activity representing a work item of said process may be started by evaluating a truth-value of a start-condition once truth-values of all incoming control-connectors of said target-activity have been ~~posted~~ <u>determined;</u> and ~~initiate~~ <u>initiating</u> a timed-evaluation-step, said timed-evaluation step comprising the steps of:

evaluating if at least a first one of said incoming control-connectors is associated with a time-interval defining a maximum period of time, as measured from a reference point, after which the target-activity is to be started, and evaluating if said time-interval has expired,

and, in the affirmative case, said timed-evaluation-step, <u>in the second mode</u> ~~as a~~ ~~deviation from the standard behavior~~ of processing start-conditions, continuing the processing to start said target-activity even if not all truth-values of said incoming control-connectors have been ~~posted~~ <u>determined</u> yet,

if the truth-value of said first incoming control-connector has been posted, and

if said truth-value evaluates to TRUE<u>;</u>

<u>wherein the timed-evaluation-step is repeated until all control-connectors of the target</u> <u>activity have been evaluated, and wherein the data processing program implemented on the data</u> <u>processing system is by default operative in the first mode, and the second mode is automatically</u>

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selected when the truth-value of the first incoming control-connector has been determined to be TRUE.

6. (Canceled)

7. (Currently amended) A computer-based process management system comprising at least one process-model, the process-model modeling a process comprising one or more process-activities being nodes of an arbitrary graph and directed control-connectors of the graph defining a potential control flow within the process-model, the system being operative: (i) in a first mode, to evaluate determine if a target-activity representing a work item of the process may be started by evaluating a truth-value of a start-condition once truth-values of all incoming control-connectors of the target-activity have been posted determined; and (ii) to perform a timed-evaluation-step, the timed-evaluation step evaluating:

if at least a first one of the incoming control-connectors is associated with a time-interval defining a maximum period of time, as measured from a reference point, after which the target-activity is to be started, and

if the time-interval has expired,

and, in the affirmative case, in a second mode, the timed-evaluation-step continuing the processing to start the target-activity even if not all truth-values of the incoming control-connectors have been posted determined yet,

if the truth-value of the first incoming control-connector has been posted determined, and

if the truth-value evaluates to TRUE;

wherein the timed-evaluation-step is repeated until all control-connectors of the target activity have been evaluated, and wherein the system is by default operative in the first mode, and the second mode is automatically selected when the truth-value of the first incoming control-connector has been determined to be TRUE.

8. (Currently amended) An article of manufacture for processing start-conditions processed by a computer system acting as a Workflow-Management-System (WFMS) or a computer system

with comparable functionality, the WFMS comprising at least one process-model, the process-model modeling a process comprising one or more process-activities being nodes of an arbitrary graph and directed control-connectors of the graph defining a potential control flow within the process-model, the article of manufacture comprising a machine readable medium containing one or more programs which when executed implement the steps of:

~~evaluating~~ determining, in a first mode, if a target-activity representing a work item of the process may be started by evaluating a truth-value of a start-condition once truth-values of all incoming control-connectors of the target-activity have been ~~posted~~ determined; and

performing a timed-evaluation-step, the timed-evaluation step evaluating:

if at least a first one of the incoming control-connectors is associated with a time-interval defining a maximum period of time, as measured from a reference point, after which the target-activity is to be started, and

if the time-interval has expired,

and, in the affirmative case, in a second mode, the timed-evaluation-step continuing the processing to start the target-activity even if not all truth-values of the incoming control-connectors have been ~~posted~~ determined yet,

if the truth-value of the first incoming control-connector has been posted, and

if the truth-value evaluates to TRUE;

wherein the timed-evaluation-step is repeated until all control-connectors of the target activity have been evaluated.

9. (Previously presented) The article of manufacture recited in claim 8, wherein the first incoming control-connector is associated with a commencing-activity, the commencing-activity corresponding to one of the process-activities in the process model, and wherein the timed-evaluation-step uses as a starting point for the time-interval the point in time when the commencing-activity is completed.

10. (Previously presented) The article of manufacture recited in claim 8, wherein the first incoming control-connector is associated with a path from the commencing-activity to the target-

activity, and the timed-evaluation-step continues processing to start the target-activity, if the associated path has been traversed.

11. (Currently amended) A computerized method for processing start-conditions of <u>one or more</u> process-activities in a computer system operative as a workflow management system (WFMS), the WFMS comprising at least one process-model for representing a process, the process-model forming an arbitrary graph comprising a plurality of nodes and corresponding control-connectors, each of the process-activities being represented by a given one of the nodes in the arbitrary graph and each of the control-connectors defining a potential control flow within the process-model, the method comprising the steps of:

in a first mode of processing, determining whether a target-activity representing a work item of the process may be started by evaluating a truth-value of a start-condition once truth-values of all incoming control-connectors of the target-activity have been ~~posted~~ <u>determined</u>; and

performing a timed-evaluation procedure, the timed-evaluation procedure comprising:

determining whether at least a first one of the incoming control-connectors of the target-activity is associated with a time-interval, the time-interval specifying a maximum period of time, as measured from a specified reference point, after which the target-activity is to be started;

when the first incoming control-connector is associated with a time-interval, determining whether the time-interval has expired;

when the time-interval has expired, in a second mode of processing, continuing the processing to start the target-activity even if the truth-values of all the incoming control-connectors have not yet been ~~posted~~ <u>determined</u>; and

repeating the timed-evaluation procedure for another one of the control-connectors, until all of the control-connectors of the target-activity have been evaluated;

wherein the second mode of processing is automatically selected when the truth-value of the first incoming control-connector has been posted, and when the truth-value evaluates to TRUE.